AN ARCHAEOLOGICAL SURVEY OF THE 130-ACRE NATIONAL CENTER FOR THERAPEUTICS MANUFACTURING ENVIRONMENTAL SURVEY AREA IN CENTRAL BRAZOS COUNTY TEXAS

Antiquities Permit 5456



By William E. Moore

Brazos Valley Research Associates Contract Report Number 225

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ABSTRACT

An archaeological survey for the proposed National Center for Therapeutics Manufacturing on a 130-acre tract in central Brazos County, Texas was conducted by Brazos Valley Research Associates (BVRA) on November 19 and 20, 2009 under antiquities permit 5456. The project is on property owned by The Texas A&M University System. The area was investigated by a surface inspection as well as shovel testing and probing. The area recorded as site 41BZ38 was visited, and found to have been destroyed. No previously unrecorded prehistoric or historic sites were identified and recorded, and no artifacts were collected. It is recommended that The Texas A&M University System be allowed to proceed with construction of the National Center for Therapeutics Manufacturing as planned. Copies of the final report are on file at the Texas Historical Commission, the Texas Archeological Research Laboratory (TARL), The Texas A&M University System, the Texas State Library, Aviles Engineering Corporation, and BVRA.

ACKNOWLEDGMENTS

Truman E. Louderback at Aviles Engineering Corporation and J. Brett Cumpton at The Texas A&M University System provided maps and logistical support. The background check for previously recorded sites in the project area was conducted by Carolyn Spock, Head of Records at TARL. Randall Anderson and Tanner Singleton assisted with the shovel testing, and Mr. Singleton is responsible for the photographs that appear in this report. William A. Dickens and Bradley F. Bowman are thanked for sharing their knowledge of sites in the area. The figures appearing in this report were prepared by Lili Lyddon of LL Technical Services who also edited the report.

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INTRODUCTION

BVRA was retained by Aviles Engineering Corporation as a sub-consultant to The Texas A&M University System to conduct a Phase I cultural resources survey at the 130-acre site of the proposed National Center for Therapeutics Manufacturing on land owned by The Texas A&M University System in central Brazos County (Figure 1). Based on an examination of the project area as depicted on the topographic map, the soil survey for Brazos County, and a conversation with other archaeologists, the project area was considered to be a low probability area in terms of containing significant prehistoric and/or historic sites. Prehistoric site 41BZ38 was recorded by the author in 1978, and it is at the very edge of the project area on its southeastern boundary. Since the construction of this project will be financed by a municipality of the State of Texas, an Antiquities Permit was required, and permit 5456 was assigned to this project. The field survey was accomplished on November 19 and 20, 2009. The project area is depicted on United States Geological Survey (USGS) 7.5' topographical quadrangle Wellborn (3096-421), dated 1961 and photo-revised in 1980 (Figure 2).

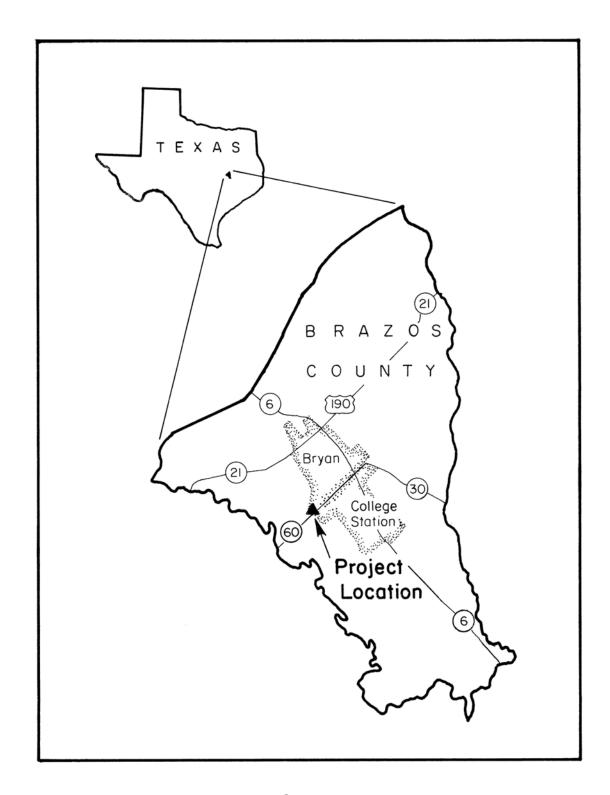


Figure 1. General Location

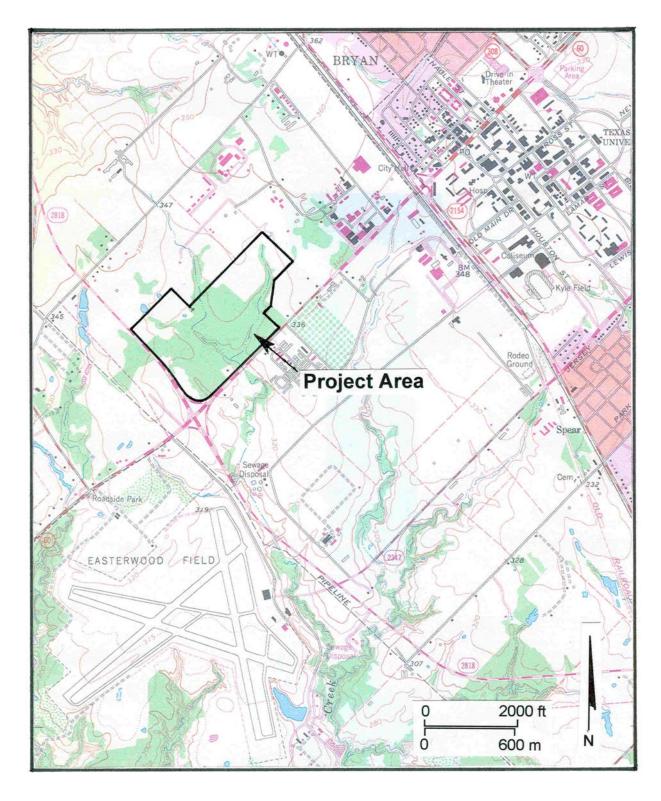


Figure 2. Project Area on Topographic Quadrangle Wellborn

ENVIRONMENTAL SETTING

The project area is located within the West Gulf Coastal Plain section of the Coastal Plain physiographic province as defined by Fenneman (1938:100-120). This physiographic section is subdivided according to the age of the geological formations (Gulf series) that roughly parallel the Texas coastline. The area is hilly and situated within the East Texas timber belt. Gould (1969) describes it as an area characterized by gently rolling to hilly topography with light colored soils that are acidic sandy loams or The climate is subhumid to humid, and the weather is considered to be predominately warm. Annual rainfall for Brazos County is 39.21 inches. A January minimum temperature of 42 degrees Fahrenheit and a July maximum temperature of 95 degrees Fahrenheit combine to produce a growing season of 274 days (Kingston and Harris 1983:180). The altitude above mean sea level in the county varies from 200-400 feet. In the project area, the altitude is 320 to 340 feet above mean sea level. According to the soil survey for Brazos County (Chervenka 2003:Sheet 32), the soils in the project area consist of Booneville fine sandy loam, 0 to 1 percent slopes (BoA) Booneville fine sandy loam, 1 to 3 percent slopes (BoB), and Zack very fine sandy loam, 1 to 5 percent slopes (ZaB). These are upland soils located on footslopes. The native vegetation in this area consisted of open savannah with mid and tall grasses. Today, the area is covered with mixed hardwoods and a thick understory (Figure 3). A typical profile of both soils consists of a surface layer of sandy loam from 0 to 17 inches. The subsoil is clay from 17 to 36 and 41 inches. These soils are somewhat poorly drained, and the depth to the water table is 0.5 to 1.0 foot. Runoff is slow, and soil permeability is very slow.

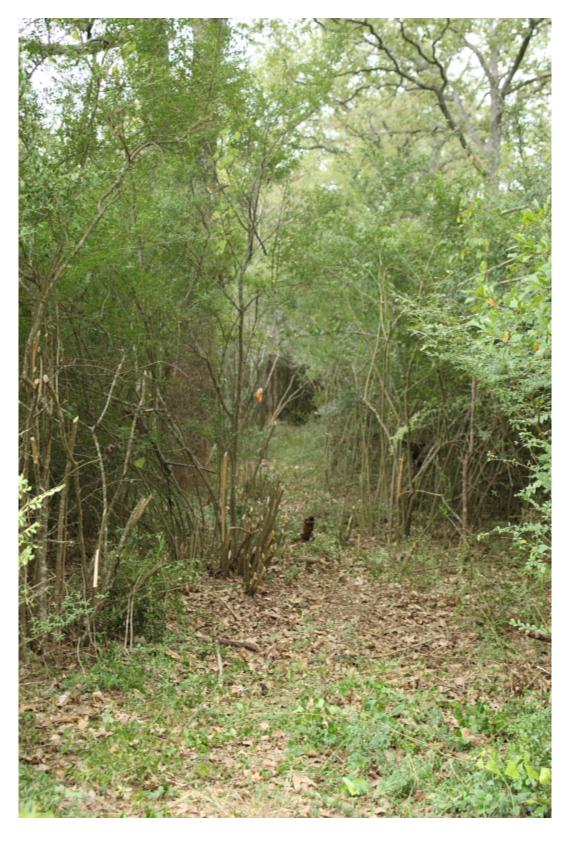


Figure 3. Vegetation in the Project Area

ARCHAEOLOGICAL BACKGROUND

According to the Office of the State Archeologist, Brazos County is located in the Southeastern Region of Texas (Figure 3). A check of the records at TARL revealed that significant prehistoric and historic sites have been recorded in the county. Prehistoric sites in this area are typically found on sandy ridges and uplands in close proximity to dependable sources of water such as creeks and rivers. Artifacts associated with the Archaic and Paleo-Indian periods have been found at a few sites, but no sites that date solely to these periods are known in the county, and Late Prehistoric sites are the most numerous. One site (41BZ132) containing an Archaic projectile point and burned rock was found during a previous survey of the Traditions Golf Course (Moore 2000), but additional work is needed to determine if this is a pure Archaic site. Prehistoric burials have been found at sites in adjacent counties such as 41BU16 and 41BU17 in Burleson County and eroding from the Brazos River, but no burials have been reported at sites in Site 41BZ38 was recorded by the author in 1978 based on two Brazos County. possible cores and two flakes on a sandy hill adjacent to Farm-to-Market Road 60 (Raymond Stoltzer Parkway). The three largest surveys in the county were for the Tradition Golf and Country Club at University Ranch by BVRA (Moore 2000), the Bush Presidential Library Center by Archaeology Consultants (Moore and Warren 1993), and the White Creek Archaeological Project by the Archaeological Research Laboratory at Texas A&M University (Thoms 1993). Historic sites are not always tied to water and can consist of standing structures dating to the 19th and 20th centuries and isolated features associated with farming and ranching such as cisterns, wells, and outbuildings. certain areas historic bridges and cemeteries are present. One major historic site is the Richard Carter house site (41BZ74) that dates to the 19th century (Carlson 1983, 1987). This site represents the earliest historic settlement in the county at circa 1831. Two early log structures have been reported in the county. One is an early cabin (41BZ93), and the other is a log crib or cabin (41BZ89) that has been destroyed. The town of Boonville (41BZ91), including Boonville Cemetery, was the first county seat of Brazos County and was established in 1841 (Webb 1952:188).

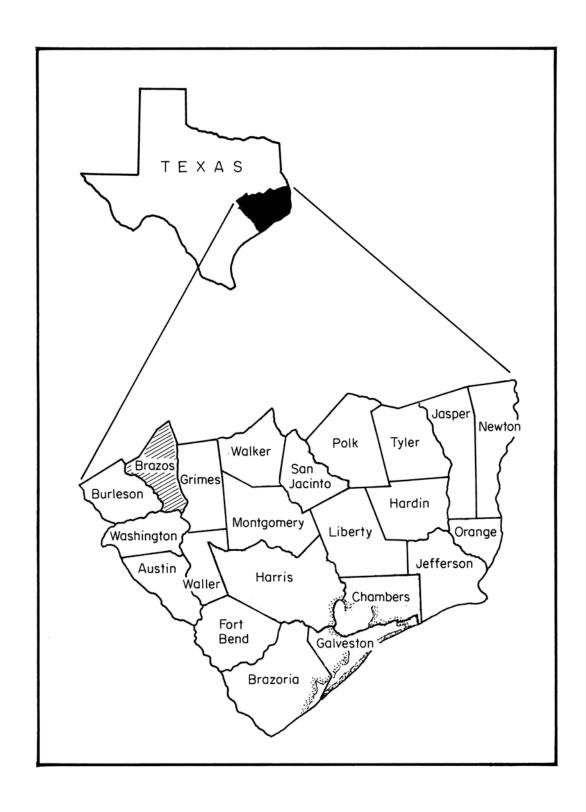


Figure 4. Southeast Texas Cultural-Geographical Region (After Moore 1989)

METHODS

Prior to the commencement of the field survey, the Texas Historic Sites Atlas and the site files at TARL were checked for previously recorded sites and surveys in the project area and vicinity. Archaeologists William A. Dickens and Bradley F. Bowman were consulted, and they shared their knowledge of sites in the area. The project area was examined on November 19 and 20, 2009, and investigated through a surface inspection and shovel testing. The area was covered by following transects spaced approximately 300 feet apart and a thorough surface inspection of areas not covered with thick woods and brush. Shovel tests were dug to clay when possible; however, some tests were terminated due to the presence of water. Three areas marked for shovel testing were avoided due to standing water at the surface. The size of each test was 30 x 50 cm and varied in depth from 10 to 60 centimeter below the existing ground surface. All excavated fill was screened through ½ inch hardware cloth. Data obtained from shovel testing were recorded on a shovel test log (Appendix I). In all, 43 shovel tests were dug. The project area was documented through digital photography.

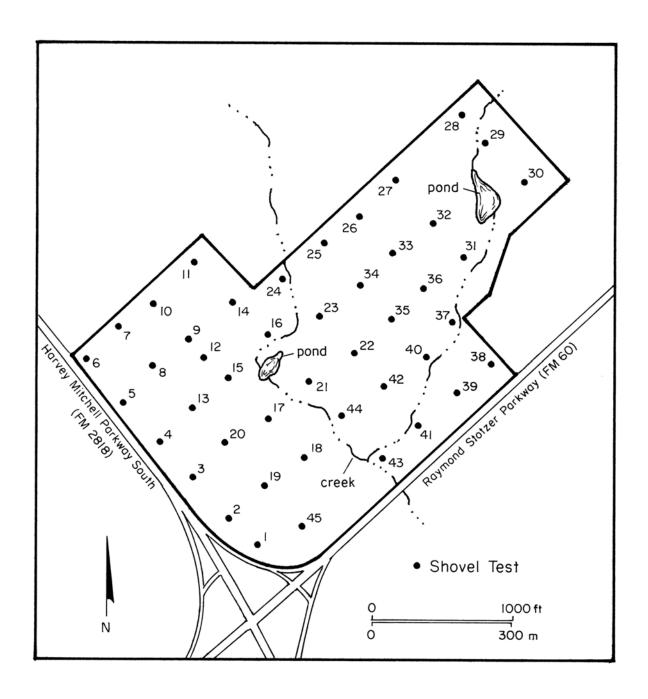


Figure 5. Shovel Tests in the Project Area

RESULTS AND CONCLUSIONS

Examination of the files at TARL revealed one prehistoric site (41BZ38) has been recorded at the southern edge of the project area. According to the Texas Archeological Sites Atlas, professional archaeologists have not surveyed this area. Site 41BZ38 was recorded by the author in 1978 based on the presence of two flakes and two possible cores. The area where these artifacts were observed has been disturbed to the point that it is no longer recognizable, and no cultural materials were found in any of the shovel tests near the site area as previously recorded. It should be stated here that the artifacts observed in 1978 were found in the road and outside of the current project area. The project area was adequately covered, and the only cultural materials found were the fragmented base of a modern bottle and a small unidentifiable bone fragment. It is concluded that the project area was not a likely setting for prehistoric occupation based on the shallow soils, shallow water table, and the fact that the only streams in the area are the upper reaches of two minor tributaries. In historic times, the area was probably used as pasture as indicated by the soil survey for Brazos County based on the soil types present. No evidence of structures or features associated with farming or ranching were observed. Disturbance along the tributaries consists of clearing and the construction of ponds or stock tanks. In an aerial photograph dated 1974, the tributaries appear to be undisturbed, but disturbance is visible in a 1996 aerial photograph.

RECOMMENDATIONS

No previously unrecorded sites were found in the project area, and site 41BZ38 was determined not to contain research potential. Therefore, it is recommended that The Texas A&M University System be allowed to proceed with construction as planned. It is always possible that archaeological sites are missed during any cultural resources survey. Should areas containing prehistoric or historic artifacts not discussed in this report be discovered during construction, the THC must be notified immediately and all work stopped in the area of concern until the situation can be evaluated.

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APPENDIX I: SHOVEL TEST LOG

Test	Depth	Reason for Termination	Results
01	10 cm	clay	negative
02	50 cm	clay	negative
03	35 cm	clay	negative
04	22 cm	clay	negative
05	27 cm	clay	negative
06	26 cm	clay	negative
07	20 cm	clay	negative
80	36 cm	water table	negative
09	no test	standing water	negative
10	53 cm	clay	negative
11	no test	standing water	negative
12	30 cm	water table	negative
13	50 cm	clay	negative
14	30 cm	water table	negative
15	40 cm	clay	negative
16	25 cm	water table	negative
17	37 cm	clay	negative
18	58 cm	clay	bottle fragment
19	30 cm	clay	negative
20	20 cm	clay	negative
21	34 cm	clay	negative
22	20 cm	clay	negative
23	16 cm	clay	negative
24	20 cm	clay	negative
25	20 cm	clay	negative
26	55 cm	clay	bone fragment
27	50 cm	clay	negative
28	15 cm	clay	negative
29	20 cm	clay	negative
30	23 cm	clay	negative
31	43 cm	clay	negative
32	53 cm	clay	negative
33	36 cm	clay	negative
34	27 cm	clay	negative
35	60 cm	clay	negative
36	24 cm	clay	negative
37	24 cm	clay	negative
38	33 cm	clay	negative

Test	Depth	Reason for Termination	Results
39	33 cm	clay	negative
40	36 cm	clay	negative
41	24 cm	clay	negative
42	25 cm	clay	negative
43	58 cm	clay	negative
44	34 cm	clay	negative
45	23 cm	clay	negative